ALLOWED CLAIMS

Claim 1: A slave test unit comprising:

first and second phone line connectors attached to first and second phone lines, respectively, each of the first and second phone lines allowing communications to and from the slave test unit over the respective phone line, and each of the first and second phone lines being connected to a digital data network so that communications transmitted via packets through the digital data network are transmitted between the digital data network and the slave test unit over the respective phone line;

means for transmitting and receiving electrical signals as communications via the first and second phone line connectors over the first and second phone lines, respectively, the electrical signals being transmitted and received as communications between the slave test unit and a remote test unit through the digital data network, electrical signals received by the slave test unit from the remote test unit comprising test commands;

means for decoding the test commands from the electrical signals received from the remote test unit; and

means for executing the test commands, the executing means including the ability to generate test signals on either of the first and second phone lines, the test commands being received exclusively from the remote test unit, to thereby test voice signal quality of voice calls transmitted through the first and second phone lines and as packets through the digital data network.

Claim 2: The slave test unit of claim 1, further comprising means for encoding the test commands into the electrical signals sent via the first and second phone line connectors to the remote test unit.

Claim 3: The slave test unit of claim 1, wherein one of the test commands is a dialback command.

Claim 4: The slave test unit of claim 1, wherein one of the test commands is a loopback command.

Claim 5: The slave test unit of claim 1, wherein one of the test commands is a quiet termination command.

Claim 6: The slave test unit of claim 1, wherein the remote test unit is a master test unit possessing a human operator interface.

Claim 7: The slave test unit of claim 1, wherein the remote test unit is another slave test unit.

Claim 8: The slave test unit of claim 1, wherein the test commands are encoded and received as DTMF signals.

Claim 9: The slave test unit of claim 1, wherein at least one of the first and second phone line connectors is adapted for FXO/FXS telephone ports.

Claim 10: The slave test unit of claim 1, wherein at least one of the first and second phone line connectors is adapted for E&M telephone ports.

Claim 11: A method comprising:

establishing first and second phone connections between a slave test unit and a remote test unit through a digital data network, the first and second phone connections being established over first and second phone lines, respectively, each of the first and second phone lines allowing communications to and from the slave test unit over the respective phone line, and each of the first and second phone lines being connected to the digital data network so that communications transmitted between the slave test unit and the remote test unit are transmitted via packets through the digital data network and are transmitted between the digital data network and the slave test unit over the respective phone line;

receiving electrical signals as communications by the slave test unit from the remote test unit via at least one of the first and second phone lines, the electrical signals comprising test commands;

decoding the test commands from the electrical signals by the slave test unit; and

executing the test commands by the slave test unit, said executing including the ability to generate test signals on either of the first and second phone lines, the test commands being received exclusively from the remote test unit, to thereby test voice signal quality of voice calls transmitted through the first and second phone lines and as

packets through the digital data network.

Claim 12: The method of claim 11, wherein one of the test commands executed in said executing is a dialback command.

Claim 13: The method of claim 11, wherein one of the test commands executed in said executing is a loopback command.

Claim 14: The method of claim 11, wherein one of the test commands executed in said executing is a quiet termination command.

Claim 15: The method of claim 11, wherein one of the test commands executed in said executing is an encoding and transmission of the test commands via at least one of the first and second phone connections.

Claim 16: The method of claim 11, wherein the remote test unit is a master test unit.

Claim 17: The method of claim 11, wherein the remote test unit is a slave test unit.

Claim 18: The method of claim 11, wherein the test commands of said receiving are encoded by the remote test unit as DTMF signals.

Claim 19: An apparatus comprising:

a slave test unit located on a phone company customer's premises and connected to a phone line via a phone jack, and connected to a digital data network via the phone line; and

a remote test unit connected to the digital data network so that electrical signals are transmitted from the remote test unit to the slave test unit by traveling via packets through the digital data network and then over the phone line from the digital data network to the slave test unit, and so that electrical signals are transmitted from the slave test unit to the remote test unit by traveling from the slave test unit to the digital data network over the phone line and then via packets through the digital data network,

wherein electrical signals transmitted from the remote test unit to the slave test unit in response to a call initiated from the remote test unit with the remote test unit positioned

at an end point of the call include a test command indicating a test signal to be generated on the phone line by the slave test unit, and the slave test unit generates the test signal on the phone line in accordance with the test command, the apparatus thereby testing voice signal quality of voice calls transmitted through the phone line and as packets through the digital data network.

Claim 20: The apparatus of claim 19, wherein the test command is a dialback command.

Claim 21: The apparatus of claim 19, wherein the test command is a loopback command.

Claim 22: The apparatus of claim 19, wherein the test command is a quiet termination command.

Claim 23: The apparatus of claim 19, wherein the remote test unit is a master test unit possessing a human operator interface.

Claim 24: The apparatus of claim 19, wherein the remote test unit is another slave test unit.

Claim 25: The apparatus of claim 19, wherein the test command is encoded and received as a DTMF signal.

Claim 26: An apparatus comprising:

a slave test unit located on a phone company customer's premises and connected to a phone line via a phone jack, and connected to a digital data network via the phone line; and

a remote test unit connected to the digital data network so that electrical signals are transmitted from the remote test unit to the slave test unit by traveling via packets through the digital data network and then over the phone line from the digital data network to the slave test unit, and so that electrical signals are transmitted from the slave test unit to the remote test unit by traveling from the slave test unit to the digital data network over the phone line and then via packets through the digital data network, electrical signals transmitted from the remote test unit to the slave test unit in response to a call initiated from the remote test unit with the remote test unit positioned at an end point of the call

including a test command indicating a test signal to be generated on the phone line by the slave test unit, and

means for generating the test signal by the slave test unit on the phone line in accordance with the test command, to thereby test voice signal quality of voice calls transmitted through the phone line and as packets through the digital data network.